

2SK2709

External dimensions 2 FM100

Absolute Maximum Ratings (Ta = 25°C)

Symbol	Ratings	Unit
V _{DSS}	600	V
V _{GSS}	±30	V
I _D	±8.5	A
I _D (pulse) *1	±34	A
P _D	85 (Tc = 25°C)	W
E _{AS} *2	300	mJ
I _{AS}	8.5	A
T _{ch}	150	°C
T _{stg}	-55 to +150	°C

*1: P_w ≤ 100μs, duty cycle ≤ 1%

*2: V_{DD} = 30V, L = 8mH, I_L = 8.5A, unclamped, R_G = 50Ω, See Figure 1 on Page 5.

Electrical Characteristics (Ta = 25°C)

Symbol	Ratings			Unit	Conditions
	min	typ	max		
V _{(BR) DSS}	600			V	I _D = 100μA, V _{GS} = 0V
I _{GSS}			±100	nA	V _{GS} = ±30V
I _{DSS}			100	μA	V _{DS} = 600V, V _{GS} = 0V
V _{TH}	2.0	3.0	4.0	V	V _{DS} = 10V, I _D = 1mA
Re (yfs)	5.0	7.0		S	V _{DS} = 20V, I _D = 4A
R _{DS (on)}		0.65	0.85	Ω	V _{GS} = 10V, I _D = 4A
C _{iss}		1200		pF	V _{DS} = 10V, f = 1.0MHz, V _{GS} = 0V
C _{oss}		270		pF	
C _{rss}		150		pF	
t _{d (on)}		30		ns	I _D = 4A, V _{DD} = 250V, R _L = 62.5Ω, V _{GS} = 10V, See Figure 2 on Page 5.
t _r		40		ns	
t _{d (off)}		110		ns	
t _f		65		ns	
V _{SD}		0.95	1.5	V	I _{SD} = 8.5A, V _{GS} = 0V